INTERGRAPH SMART® P&ID DESIGN VALIDATION

CHECK INTERGRAPH SMART® P&ID DATA AGAINST ISOMETRICS AND 3D MODELS

Choose Intergraph Smart® P&ID Design Validation to check SmartPlant Isometrics, Isogen®-generated isometrics, or PDMS 3D models against your Smart P&ID logical design. Smart P&ID Design Validation provides an iterative workflow for verifying your process design against the physical design being the PDMS 3D model and the Isometrics at the data attribute and topology levels. Take advantage of this product to create and maintain a consistent and standardized engineering data set for your entire plant lifecycle.

WHAT'S NEW

The latest version includes several enhancements aimed at boosting productivity, such as:

- A new graphical user interface (GUI) offers a much richer experience

- Pipe run attributes are listed to merge the pipe runs into pipelines

- The full content of the settings initialization file is applied on import

- Pipelines and equipment can be sorted in the Design Explorer Tree view

- P&ID and ISO viewers can be part of the main window

- Active settings can be easily applied

- Support nozzles can be correlated and linked nozzles can be automatically selected

- The solution is compatible with the Microsoft® .NET Framework

VALUE PROPOSITION

Smart P&ID Design Validation can increase productivity by ensuring current and accurate data, helping you make the right design decisions at the right time. With faster, easier comparison of piping system drawings, Design Validation provides a vital tool in resolving design flaws and preventing downstream errors, giving you data consistency in all your P&IDs, isometrics, and 3D models.

Rule-driven, intelligent graphical comparison of all drawings across the verification workflow reduces the number of design checks that must be made, thereby increasing reliability and minimizing engineering labor. In addition, a synchronized engineering data set for all drawings means less risk is involved in the maintenance and modification of the piping system.

THE WORKFLOW

The solution's concurrent workflow begins with configuration, which is performed only once per project. Because Design Validation accepts data from disparate systems, the data is converted to a neutral format before comparison (based on your design practices).

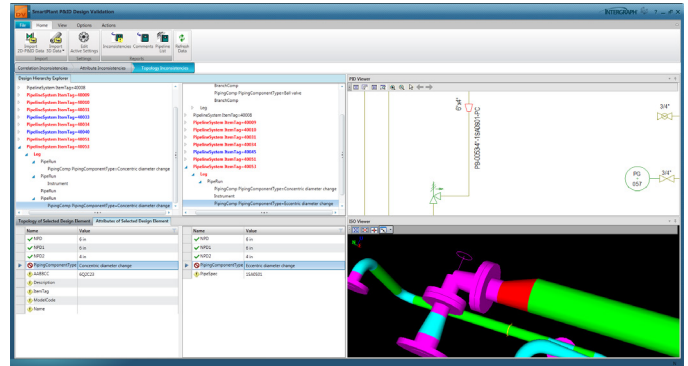Configuration allows you to define:

- Data mapping
- Design correlation criteria
- Design comparison criteria

Next, according to the focus of the design check, data is imported from Smart P&ID (PIDs) and either SmartPlant Isometrics (PCFs or PODs), ISOGEN-generated isometrics/ drawings (PCFs or IDFs), or PDMS models (DATAL). Then you begin the comparison phase.

Smart P&ID Design Validation auto-correlates the data and verifies attributes and design content/topology. It also highlights any inconsistencies that need to be resolved. To support the work process, you can quickly document the mismatched items and make notes to the responsible department. You can then send a detailed report to the team members in the discipline(s) owning the data.

FIT FOR OPERATIONS

To provide the plant operational teams the right and current information Smart P&ID Validation can make sure the logical design and the physical design, the Isometric, are in sync so if maintenance work or plant changes need to be performed the team can work from the right basis to make the changes and production decisons.

Figures 1 and 2: Smart P&ID Design Validation allows navigation of the logical (2D) P&ID and provides graphical detailed views of the (3D) model data to examine the design content of related plant items.
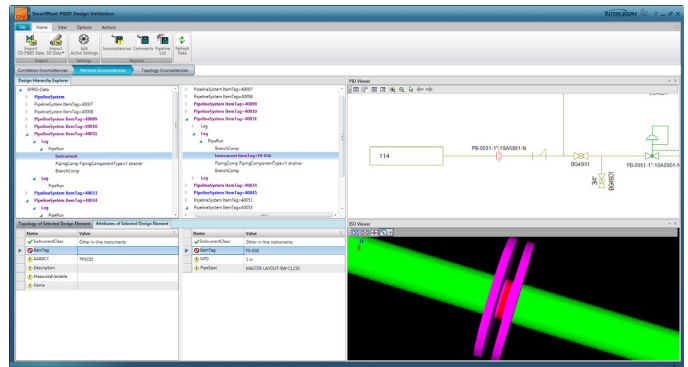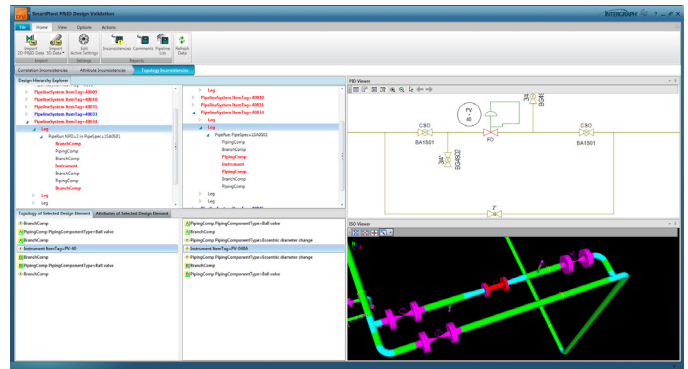

Figure 3: Smart P&ID Design Validation shows any attribute inconsistencies between related plant items.

ABOUT HEXAGON

Hexagon is a global leader in digital solutions that create Autonomous Connected Ecosystems (ACE). Our industry-specific solutions create smart digital realities that improve productivity and quality across manufacturing, infrastructure, safety and mobility applications.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.5bn EUR. Learn more at hexagon.com and follow us @HexagonAB.